

DUTY STATEMENT

Classification: Electric Generation System Specialist I	Position No. 5600-4841-001
CBID: R09	Office: Energy Generation Research
Date Prepared: March, 2009	Division: Energy Research and Development
KEY: (E) IS ESSENTIAL, (M) IS MARGINAL	

Under the direction and supervision of the Energy Commission Supervisor II (TED), the incumbent serves as part of interdisciplinary and/or interdivisional teams to plan and implement the Public Interest Energy Research (PIER) Program. The goal of the PIER Program is to conduct research, development and demonstration (RD&D) to advance science and technologies not adequately provided by the regulated and competitive markets. The incumbent will perform responsible, complex, and difficult technical analyses to support public interest energy RD&D funding; manage RD&D projects; and consult with experts in the field.

The incumbent helps implement, and report on the Energy Commission functions relating to renewable energy RD&D, including the Public Interest Energy Research (PIER) Program. The incumbent also conducts various complex technical and analytical assessments; coordinates with the RD&D functions of other public and private organizations related to renewable technologies RD&D, and assists the team lead in the development of energy policy. The goal of the PIER Program is to conduct RD&D to advance science and technologies not adequately provided by the regulated and competitive markets.

The incumbent will serve as a technical expert on issues associated with renewable resources, and integration of renewables into the electricity generation, transmission and distribution systems. The incumbent is knowledgeable of renewable technologies, advanced electric generation technologies and their relationship to competitive energy markets, and aspects of renewable integration and costs of generation, and has the ability to develop grid and cost models.

WORKING CONDITIONS:

The work is performed in an indoor office and/or meeting room setting involving sitting, standing, and/or walking. Travel may be required to participate in workshops, hearings, and outdoor project site visits that may consume 1% to 5% of the time. Additional hours beyond an eight-hour workday or forty-hour workweek may be required.

DUTIES AND RESPONSIBILITIES:

While performing the duties described below, the incumbent will be required to work alone and/or in a team environment, utilizing a personal computer and appropriate Commission

software such as word processing, analytical software, electronic mail and Internet; participate in and lead meetings with other staff and with other agencies. The incumbent will:

- 45% Technology assessment. The incumbent conducts detailed technical analytical assessments to determine the performance characteristics of renewable technologies with respect to addressing the energy issues and needs of the electricity transmission/distribution systems and consumer load demands, and the integration into the electricity distribution and transmission system of renewable energy technologies. The incumbent will develop and maintain cost/grid models for electric generation system performance and renewable energy technologies and determine the potential changes in calculating the levelized costs of electricity and developing target capital and operating costs for renewable technologies; efficiency and economics of generation system design options, including cost and performance; and the RD&D requirements relating to the development and deployment of these technologies to be added safely and reliably to the existing electricity system. The incumbent will perform highly complex electricity and renewable generation assessments on behalf of the PIER Renewables programs, and also provide technical assistance to staff in analyzing technical problems in these areas, and will present research conclusions, and provide recommendations and advice to staff in various divisions and external parties. Additionally, the incumbent will interact with Electricity Office staff on electric and transmission generation related issues, and the renewable costs of generation modeling. (E)

- 30% Research Project Management, Planning and Estimating. The incumbent serves in a team leadership role for other staff or as the project manager for the most complex research projects that have electric generation and cost modeling tasks; reviews and comments on draft deliverables submitted by research contractors; conducts detailed field inspections of project site, including the material, equipment and operations associated with renewable and electricity generation transmission/distribution research projects; reviews recommendations by other staff for renewable energy and electricity generation transmission and distribution systems; develops and manages the most complex research projects to ensure that the work performed meets the goals of the project; and prepares written status reports and oral briefings for office, division, and commission management on the status of the project. The incumbent prepares research project plans, specifies research project tasks, and estimates research budgets for research projects on renewable transmission integration and electricity generation for: wind, solar, biomass, geothermal, and hydro and ocean (wave and tidal) energy systems. The incumbent will have detailed knowledge of all renewable energy resources, the state's electricity transmission and distribution systems, and grid and generation cost models. (E)

- 15% Proposal evaluation. The incumbent determines if proposals address the technical needs of renewable integration into the electricity generation and transmission/distribution system. The incumbent reviews proposals to determine how well the project addresses the scope of the solicitation criteria including, but not limited to: the extent the project will advance science or technology, address market issues and needs, meet specified target goals and objectives; the skill and experience of the project team to carryout the technical tasks within budget and schedule, and move the results into the marketplace; and the adequacy of project funding. The incumbent prepares written findings of such evaluations for use by a technical scoring committee. (E)
- 5% Consult and maintain cooperative relationships with stakeholders including research organizations, government and utility representatives, private developers, and technical experts to identify RD&D opportunities of alternative and advanced energy systems or technologies in California. Define, develop, and implement projects that provide significant public benefits to California and meet the policy and technical objectives of the PIER Program. (E)
- 5% Perform other duties as required consistent with the specifications of this classification. (M)

SIGNATURES	
I Certify That I Am Able To Perform, With Or Without The Assistance Of A Reasonable Accommodation, The Essential Job Duties Of This Position	
<div style="border-bottom: 1px solid black; height: 1.2em; margin-bottom: 0.5em;"></div> Date Electric Generation System Specialist I	<div style="border-bottom: 1px solid black; height: 1.2em; margin-bottom: 0.5em; display: inline-block; width: 80%;"></div> SANDRA FROMM Energy Commission Supervisor II (TED) <div style="border-bottom: 1px solid black; height: 1.2em; margin-top: 0.5em; display: inline-block; width: 15%;"></div> Date